

are distinguished by a comparatively great sterility of the majority of marriages and a greater fecundity of the fertile marriages, and by an excessive mortality in early infancy. Second, that from the union of these three circumstances in one family's descendants, the physician is justified in diagnosing vesanic heredity. Third, the influence of vesanic heredity on the fecundity of the married varies according to the generation. Fourth, extreme fecundity is produced in the earlier generations, followed and ending in sterility in the later generations. Fifth, insane heredity, by the exaggerated mortality in early infancy, as well as by its sterilizing tendencies, tends to extinguish the families where it exerts an influence. Sixth, these conclusions are confirmed by the fact that, if the unions of the earlier generations give birth to a large number of children, the unions of the later generations give birth to fewer and fewer children, who are more and more puny. Seventh, it is probable that the mortality of early infancy increases with the generation, and that the vitality of the children diminishes with the number. Eighth, maternal or paternal vesanic heredity, considered by itself, confirms the previous conclusions. Ninth, paternal vesanic heredity is more powerful than maternal vesanic heredity in its influence on fecundity and sterility, and in its influence on the mortality of early infancy. Tenth, the preponderant influence of the mother on the descendants cannot but be diminished by the influence of the father just cited, and will be demonstrable in not less than ten per cent. Eleventh, the paternal influence is exerted on the children early in life ; the maternal later on.

INSANITY AND VARIOLA.—Kiernan (*American Journal of Neurology and Psychiatry*, August, 1883) states that the question of the interrelations of insanity and variola naturally resolves itself into three factors : first, the influence of variola in the production of insanity ; second, the influence of variola on coexisting insanity ; third, the influence of coexisting insanity on variola. With regard to the first factor, Kräpelin (*Archiv. für Psych.*, B. xiii) says : " Whatever be the part, real or ideal, regarded as being taken by the febrile state, the encephalic congestion, the specific poison, acting or not by decomposition of the albumen of the pustules, in the genesis of neurotic phenomena, it is most convenient to use clinical distinctions only in describing the psychical phenomena resulting from variola." He describes the psychical manifestations of the febrile stage (the initial and suppurative period) and of the terminal stage, the asthenic forms. The febrile type is a lypemania agitata with hallucinations ; the psychical manifestations usually last less than a week ; rarely more than a year. Of the cases examined by Kräpelin, fifty per cent lasted a week and less, sixteen and seven-tenths per cent. one month, the same number lasted a year, while sixteen and six-tenths per cent. lasted more than a year. Ninety-one and seven-tenths

per cent. recovered ; the remainder died or remained chronically insane. The asthenic psychoses develop sometimes with the fall of temperature, between the eruptive and suppurative period ; at other times during desquamation. The first are characterized by auditory and visual hallucinations and their consequences. This is claimed as a support for the Emminghaus' theory, that the psychical phenomena are due to toxæmia. Kräpelin says it would be more logical to suppose a direct action of the poison on the nerve centres. This theory is more applicable to the febrile psychical phenomena. The asthenic psychoses can, with more plausibility, be ascribed to acute exhaustion of the nerve centres succeeding to considerable thermic oscillations, and also consequent on central serous loss from peripheral pustulation. The psychical phenomena presented are those of an anxious lypemania, accompanied with hallucinations and sitophobia. They are of gradual evolution. Seventeen per cent. of the asthenic cases lasted one week, twenty-four per cent. one month, twenty-one per cent. one year, and thirty per cent. more than a year. Seventy-one per cent. recovered, twenty-one per cent. remained chronically insane, and eight per cent. died. These types usually appear after a severe attack of variola. Kipp reports a case of transitory furor (*mania transitoria*) after variola. Stephanides and Paulicki in a general way confirm Kräpelin as to the existence of the psychoses mentioned. Frankel reports a case of dementia seemingly resulting from encephalitis secondary to variola, and like cases are reported by Rostans, Skae, Hasse, Gregory, Wagner, Westphal, Lagardelle, and Berti. The two last mentioned, Luys, Neustadt, Fiedler, Otto, Zippe, Thoré, MacLagan, Riva, Guttstadt, and Merriggi report cases supporting Kräpelin's opinions. Mabelle (*Annales médico-psychologiques*, September, 1883) reports a case of parietic dementia secondary to variola. Calastri, Berti, and Lagardelle, have carefully studied the effects of variola on insanity. Sixty-one cases of this kind have come under notice. Fourteen recovered from insanity on recovering from variola, eight were improved, twenty-eight were unaffected, and eleven died. Chatelain reports thirteen cases in which insane patients were attacked by small-pox. An affective lunatic remained unaffected by a light attack of variola, which was also the case with a placid dement. A querulous affective lunatic, who had a severe attack of variola, was unusually docile during the disease. A "chronic maniac with delusions of suspicion" became worse during a light attack of variola. An affective lunatic improved during the convalescence from a severe form of variola, but relapsed on recovery. Three "placid dements" were unaffected by a light attack of small-pox. Three lypemaniacs who suffered from a severe attack of variola improved during the febrile state, and one ultimately recovered. Berthier reports the case of a lypemaniac who recovered in consequence and after a severe attack of small-pox. Chiarugi has had similar experience with a maniac. Nasse claims to have seen a case of parietic dementia

cured by small-pox. Schläger reports several cases in which variola occurring during insanity caused a cessation of psychical symptoms. Merrigi reports one epileptic lunatic and two chronic confusional lunatics who improved after having been attacked by variola. He and Lombroso cite three chronic confusion lunatics who recovered. Kiernan states that in the spring of 1875, small-pox made its appearance among the workhouse men employed about the New York City Asylum for the Insane. One patient, a case of confusional insanity, was attacked by it, and during the initial fever (the same in extent with that of a workhouse variolous patient who became delirious), became perfectly capable of carrying on a clear, coherent conversation. He was transferred to the Riverside Hospital, and during a three weeks' stay there was perfectly rational; he died from a complication.

PSYCHOSES OF CHICAGO.—Clevenger, Special Pathologist, Cook County Asylum for the Insane, (*Chicago Medical Journal and Examiner*, November, 1883,) states that the psychoses of the patients tried and found insane in the city of Chicago, from August, 1882, to August, 1883, were as follows:

PSYCHOSIS.	Male.	Female.	Total.
Melancholia	22	146	168
Mania	122	36	158
“ Recurrent	8	1	9
Dementia	18	1	19
Epileptic Insanity	14	5	19
Imbecility	6	1	7
Monomania	7	2	9
Hebephrenia	3		3
Alcoholic Insanity	7	2	9
Senile Dementia	5	7	12
Paretic Dementia	6	1	7
Katatonía	2		2
Stuporous Insanity (Acute Dementia)	1		1
Idiocy	1		1
Undiagnosed	7	7	14
Melancholia, Recurrent	2		2
Circular Insanity	1		1
Hysterical Insanity		5	5
Mental Deterioration		1	1
Delirium, Grave	1		1
Total	233	215	448

These are exclusive of the cases sent to the State asylums, perhaps one half as much again.

“PHTHISICAL INSANITY.”—Under this title Dr. A. Campbell